

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (Previously amended): A medical needle shield apparatus comprising:  
a monolithic needle hub including an integrally formed collar extending distally from the needle hub and defining an interior cavity; and

a shield having a proximal end receivable within the interior cavity of the collar in an interlocking engagement and including a plurality of hingedly connected segments extending distally from the proximal end, the shield being extensible between a retracted position and an extended position;

wherein the interior cavity of the collar of the monolithic needle hub defines notches that receive tabs formed with the proximal end of the shield to lock the needle hub to the shield and inhibit rotation of the shield within the collar.

Claim 2 (Previously canceled).

Claim 3 (Previously canceled).

Claim 4 (Original): A medical needle shield apparatus as recited in claim 1, further comprising at least two surfaces which engage to limit rotation of the shield relative to the needle hub.

Claim 5 (Previously amended): A medical needle shield apparatus comprising:  
a monolithic needle hub having an integral collar defining an interior cavity, the monolithic needle hub supporting a needle having a distal end; and

a shield having a proximal end, and a distal end and a lock disposed therebetween, the

proximal end of the shield being receivable within the interior cavity of the collar in an interlocking engagement, the shield being manually extensible from a retracted position to an extended position, such that the distal end of the shield extends in parallel with a longitudinal axis of the needle, wherein the lock is configured to capture a portion of the needle disposed proximal to the distal end of the needle to prevent displacement of the shield from the extended position and wherein the distal end of the shield encloses at least a portion of the distal end of the needle when the shield is in the extended position; wherein the interior cavity of the collar of the monolithic needle hub defines notches that receive tabs formed with the proximal end of the shield to lock the needle hub to the shield and inhibit rotation of the shield within the collar.

Claim 6 (Original): A medical needle shield apparatus as recited in claim 5, wherein the collar is monolithically formed with the needle hub.

Claim 7 (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield includes at least two hingedly connected segments.

Claim 8 (Canceled).

Claim 9 (Currently amended): A medical needle shield apparatus as recited in claim [8] 5, wherein the tabs are biased for receipt within the notches.

Claim 10 (Previously canceled).

Claim 11 (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield is irreversibly locked in the extended position.

Claim 12 (Previously canceled).

Claim 13 (Previously canceled).

Claim 14 (Previously amended): A medical needle shield apparatus as recited in claim 5, wherein the lock includes a portion configured to flexibly engage the needle and biased to lockably retain the needle.

Claim 15 (Previously amended): A medical needle shield apparatus as recited in claim 5, wherein the lock is configured to lock the shield in the extended position.

Claim 16 (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield includes a linear bearing configured to enclose at least a portion of the distal end of the needle.

Claim 17 (Original): A medical needle shield apparatus as recited in claim 16, wherein the linear bearing is hingedly connected to the shield proximal to the distal end of the shield.

Claim 18 (Original): A medical needle shield apparatus as recited in claim 16, wherein the linear bearing is configured such that at least a portion of the needle is enclosed by the shield during extension of the shield.

Claim 19 (Original): A medical needle shield apparatus as recited in claim 5, wherein the needle hub has a luer fitting configured to attach to a syringe.

Claim 20 (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield includes a proximal segment engaging a retention catch formed with the proximal end of the shield to releasably dispose the shield in the retracted position.

Claim 21 (Previously canceled).

Claim 22 (Previously canceled).

Claim 23 (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield has an articulating actuator configured to urge the shield towards the extended position.

Claim 24 (Previously canceled).

Claim 25 (Original): A medical needle shield apparatus as recited in claim 5, wherein the needle hub includes guide surfaces to facilitate engagement of the shield and the needle hub.

Claim 26 (Previously canceled).

Claim 27 (Original): A medical needle shield apparatus as recited in claim 7, wherein the segments are connected via living hinges.

Claim 28 (Original): A medical needle shield apparatus as recited in claim 27, wherein the segments include relief portions formed adjacent the living hinges.

Claim 29 (Original): A medical needle shield apparatus as recited in claim 28, wherein the relief portions are configured to flex inwardly toward the needle.

Claim 30 (Original): A medical needle shield apparatus as recited in claim 5, wherein the shield has a proximal segment including at least one rib.

Claim 31 (Original): A medical needle shield apparatus as recited in claim 30, wherein the at least one rib has a transverse orientation.

Claim 32 (Previously canceled).

Claim 33 (Previously canceled).

Claim 34 (Previously canceled).

Claim 35 (Previously canceled).

Claim 36 (Previously canceled).

Claim 37 (Previously canceled).

Claim 38 (Previously canceled).

Claim 39 (Previously canceled).

Appln. No. 09/892,593  
Amdt. Dated August 21, 2006

Claim 40 (Previously canceled).

Claim 41 (Previously canceled).

Claim 42 (Previously canceled).

Claim 43 (Previously canceled).

Claim 44 (Previously canceled).

Claim 45 (Previously canceled).

Claim 46 (Previously canceled).

Claim 47 (Previously canceled).

Claim 48 (Previously canceled).

Claim 49 (Previously canceled).

Claim 50 (Previously canceled).

Claim 51 (Previously canceled).

Claim 52 (Previously canceled).

Claim 53 (Previously canceled).

Claim 54 (Previously canceled).

Claim 55 (Previously canceled).

Claim 56 (Previously canceled).

Claim 57 (Previously canceled).

Claim 58 (Previously canceled).

Claim 59 (Previously canceled).

Claim 60 (Original): The medical needle shield apparatus according to claim 7, wherein at least one segment includes at least one rib for positioning the needle.

Claim 61 (Previously canceled).

Claim 62 (Original): The medical needle shield apparatus according to claim 5, wherein the shield further includes a raised surface for urging the shield to the extended position.

Claim 63 (Original): The medical needle shield apparatus according to claim 5, wherein the needle comprises an open-ended needle.

Claim 64 (Original): The medical needle shield apparatus according to claim 5, wherein the needle comprises a double wall needle.

Claim 65 (Original): The medical needle shield apparatus according to claim 5, wherein the distal end of the needle includes a bevel aligned in a plane of symmetry with the shield for indicating orientation of the bevel.

Claim 66 (Previously canceled).

Claim 67 (Previously canceled).

Claim 68 (Previously canceled).

Claim 69 (Previously amended): A medical needle shield apparatus comprising:

a monolithic needle hub means for supporting a needle having a distal end and having an integral collar defining an interior cavity; and

a shield means, having a proximal end, a distal end and a lock disposed therebetween, the proximal end of the shield means being configured to be received within the interior cavity of the collar of the needle hub means in an interlocking engagement therewith, the shield means being manually extensible between a retracted position and an extended position, such that the distal end of the shield means extends in parallel with a longitudinal axis of the needle, wherein the lock is configured to capture a portion of the needle disposed proximal to the distal end of the

needle to prevent displacement of the shield means from the extended position, wherein the distal end of the shield means encloses at least a portion of the distal end of the needle when the shield means is in the extended position; wherein the interior cavity of the collar of the monolithic needle hub defines notches that receive tabs formed with the proximal end of the shield to lock the needle hub to the shield and inhibit rotation of the shield within the collar.

Claim 70 (Original): A medical needle shield apparatus as recited in claim 69, wherein the shield means includes a locking means for locking the shield means in the extended position.

Claim 71 (Currently amended): A medical needle shield apparatus comprising:  
a monolithically formed needle hub having an integrally formed collar defining an interior cavity having notches, the needle hub supporting a needle cannula having a distal end; and

a shield having a proximal end and a distal end, the proximal end of the shield being receivable within the interior cavity of the collar in an interlocking engagement ~~[the]~~ to inhibit rotation of the shield ~~[with-in]~~ within the collar, wherein the shield has tabs biased to project through the notches, the shield including a distal segment and a proximal segment connected via a living hinge between the proximal end and the distal end, and being extensible between a retracted position and an extended position, the distal segment including a linear bearing configured to slide along the needle cannula during extension of the shield and enclose at least a portion of the needle cannula in the extended position and the proximal segment having a locking means for locking the shield in the extended position, the proximal end of the shield having a retention catch configured to engage the proximal segment for releasably securing the shield in the retracted position, the proximal segment further including transverse ribs.

Appln. No. 09/892,593  
Amdt. Dated August 21, 2006

Claim 72 (Previously canceled).

Claim 73 (Previously canceled).

Claim 74 (Previously canceled).

Claim 75 (Previously canceled).

Claim 76 (Previously canceled).

Claim 77 (Previously canceled).

Claim 78 (Previously canceled).

Claim 79 (Previously canceled).

Claim 80 (Previously canceled).

Claim 81 (Previously canceled).

Claim 82 (Previously canceled).

Claim 83 (Previously canceled).

Claim 84 (Previously canceled).

Claim 85 (Previously canceled).

Claim 86 (Previously canceled).

Claim 87 (Previously canceled).

Claim 88 (Previously canceled).

Claim 89 (Previously canceled).

Claim 90 (Previously canceled).

Claim 91 (Previously canceled).

Claim 92 (Previously canceled).

Claim 93 (Previously canceled).